## Education and Income

How a society approaches education policy is vital to economic growth and development policy. From an individual perspective, it is widely understood that higher levels of education are tied directly to higher levels of income. In the U.S. the typical worker, regardless of educational attainment, has a median weekly income (in 2015) of \$820 (Figure 1). But those with only a high school diploma make only \$678 per week while those with a bachelor's degree make \$1,137. From a simple economic perspective, higher levels of education improve worker productivity which translates into higher wages and income.

There can be, however, significant variations within these educational levels. In Wisconsin, for example, carpenters generally require a high school degree but earn a median weekly salary of \$873 (assuming a 50-week work year). At the same time a substitute teacher in Wisconsin, which requires a bachelor's degree, earn a median weekly salary of \$645 (assuming a 50-week work year). From a policy perspective one can always find exceptions, but policy needs to focus on the broader understanding of patterns and relationships, not "outliers". While looking at those "outliers" can be informative, "outliers" should not form the core of broader policies.

This relationship between income and educational attainment carries over to a larger community or state perspective. A simple scatter plot of the percent of adults age 25 and older with a bachelor's degree or higher and state per capital income reveals a very strong positive relationship (Figure 2). The opposite could be said for the relationship between those states with a higher share of adults age 25 and older with only a high school diploma and state per capita income (Figure 3).

One of the primary reasons we see these trends, in addition to simple differences in productivity rates, is the relationship between education and innovation. The economics research is con-

sistent in finding strong positive relationships between education, innovation, and higher levels of economic growth, development and well-being. Innovation drives economic growth whether it be radical innovations such as the development of personal computers or the internet, to simple innovations





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such as an improved piece of business software that allows entrepreneurs to better track their business finances.

Perhaps even more

important is the ability of people and businesses to adopt new technologies. Large scale grain farmers, for example, did not invent precision agricultural technologies, but those that are better positioned to adopt those technologies are able to better position their farm enterprise.

> The question facing Wisconsin is whether educational policies and investments should be aimed at simply meeting current labor demands or should they be aimed with a longer-term focus on making Wisconsin more competitive on the innovation frontier, including the ability to adopt new technologies. Ideally, there is a balance between investments for what is needed today with an eye toward the future. The question is what is the appropriate balance.



Figure 3: Percent Adults (25+ Age) High School Graduate, No College and State Per Capita Income (2014)



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